

We write the future – together



From left to right: CTO Bazmi Husain, CEO ABB Group Ulrich Spiesshofer, State Secretary Mauro Dell’Ambrogio, Head of the ABB Corporate Research Center Stefan Ramseier and Managing Director ABB Switzerland Remo Lütolf.

Joseph Schumpeter was only 28 years old when he developed his theory of innovation in 1912. According to the Austrian economist’s theoretical model, entrepreneurs play a key role in looking for new “combinations” of production methods, markets and market positions for their companies. Schumpeter’s term “combination” later changed to “innovation” and became firmly anchored in the world of economics. This origin of innovation is a major reason why academia and companies involved in research are wary of each other. Ambros Speiser, a professor at the Swiss Federal Institute of Technology (ETH), had none of this wariness when he established a research centre for the global company Brown, Boverie & Cie (BBC) 50 years ago in Baden-Dättwil in the Swiss canton of Aargau. The research centre aimed to conduct cutting-edge research and develop new innovations for the company’s clients.

When BBC merged with the Swedish company ASEA to form ABB in 1988, Maurice Campagna, president of the Swiss Academies of Arts and

Sciences, became Speiser’s successor. Campaigna aligned research with the needs of ABB’s business areas. The ABB Corporate Research Center is still located in Aargau and has earned an international reputation that extends far beyond the company. Thanks to the many talented people working in its laboratories, the research centre has become a benchmark for intellectual and technical excellence.

The ABB Corporate Research Center celebrated its 50th anniversary in December. Swiss State Secretary Mauro Dell’Ambrogio addressed a large number of guests from the areas of science, politics and business at the celebration in Baden-Dättwil: “This is an important anniversary—not only for you but also for the cutting-edge research and innovation in our country.” Today there are seven research centres worldwide under the banner of ABB that are striving for innovation and socially sustainable development. In Dättwil alone there are 50 laboratories with 200 scientists from over 40 countries—along with 120 students and degree candidates.

This has made ABB a prime example of how companies can conduct and finance cutting-edge research in the long term. Employees stay at the ABB Corporate Research Center for six years on average and many of them use their experience as a springboard for an academic career.

Critics can ask the question of whether an “economisation” of research will occur in the future. Will all universities have budgets based on commissioned studies, as is already the case for Swiss universities of applied sciences? Especially considering that other public institutions, for example hospitals, now have to be managed like private sector companies. The independence of academic research is a delicate matter. Yet it is undisputed that universities must contribute knowledge for the good of society. Differentiating between basic and applied research is no longer relevant in the age of the “internet of things”; major innovations seem to be the result of finding solutions based on customers’ needs. Therefore, knowledge transfer and effective means of communicating knowledge, preferably using staff transfers, are also required.



Moreover, all publicly funded research data will be accessible to the public and free of charge by 2020. Open science is therefore exactly the right path to take: it involves open access to scientific publications and open data so anyone can access and use research data. Top-level research costs an enormous amount of money, and it is clear that the government, using taxpayers’ money, cannot fund such research projects alone. Three quarters of research expenses in Switzerland are paid by private sources. Therefore, the ABB model of a company involved in research is an optimal strategy for ensuring continuous innovation for business. Because of the knowledge transfer involved, it is ultimately beneficial for science as well.



The world of economics also established the rule that whoever sets the budget also has a say about its contents. Yet due to academic autonomy, this rule should not apply to government-funded universities, even in regard to developing new innovations and ultimately to positioning Switzerland. Nevertheless, the inspiration for Schumpeter’s theory of innovation in 1912 still rings true today for ABB and science: “We write the future – together”.